



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,059	03/01/2002	Saburo Fujita	220141US3	8193

22850 7590 09/03/2003

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

MACKEY, JAMES P

ART UNIT

PAPER NUMBER

1722

DATE MAILED: 09/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/085,059

Applicant(s)

FUJITA, SABURO

Examiner

James Mackey.

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 7-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The disclosure does not describe an apparatus having **both** a reciprocating device (required in claim 4) **and** a rotating crank mechanism (required in claim 7, which depends from claim 4). Moreover, the disclosure does not describe any replacement means relating to the recitation "in place of" (claim 7). Claims 8 and 9 are rejected due to their dependence on claim 7.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 3-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 12-19 are unclear and indefinite as to the structural relationship between the two connecting rods and **both sets** of the pairs of left half piece and right half piece, since the connection of the connecting rods, driving means and link mechanism is described only in relation to a single pair of half pieces. Further in claim 1, line 14, "the other half piece is slidably supported" is indefinite, since lines 8-9 of the claim already recite that "each pair of left half piece and right half piece of said split nut are slidably supported"; moreover, the recitation

Art Unit: 1722

“the slidably supported half piece” is indefinite as to which half piece is being referred to, since both left and right half pieces are slidably supported as recited at lines 8-9 (it appears that line 14 intends to recite that the other half piece is slidably supported relative to the connecting rod; for purposes of examination, the claim will be interpreted as such).

In claim 3, the relationship of the link plate to the link mechanism of claim 1 is not clearly set forth in the claims, thus rendering the claim indefinite (e.g., are they one and the same, or are there two distinct link connections for each set).

In claim 4, line 5, “said connecting rod” is indefinite as to which of the two rods is intended; and line 6, “said one split nut” lacks clear antecedent basis in the claim and is unclear as to which of the plural split nuts is intended.

In claim 5, lines 3 and 6, “said one split nut” lacks clear antecedent basis in the claim and is unclear as to which of the plural split nuts is intended.

In claim 6, line 3, “said platen” should be changed to --said other platen-- for clarity (see claim 1, line 5-6).

Claim 7 is indefinite as to the functioning of an apparatus having **both** a reciprocating device (required in claim 4) and a rotating crank mechanism (required in claim 7, which depends from claim 4). Note also that, to satisfy the requirements of 35 USC 112, second paragraph, a claim must *accurately* define the invention, see *In re Knowlton*, 178 USPQ 486, 492-3. Claims 8 and 9 are indefinite due to their dependence on indefinite claim 7.

In claim 8, line 3, “said one split nut” lacks clear antecedent basis in the claim and is unclear as to which of the plural split nuts is intended; and line 5, “said connecting rod” is

Art Unit: 1722

indefinite as to which of the two rods is intended. Further in claim 8, lines 3+ are indefinite as to the relationship of the "driving device" and "geared motor with brake" with the motor of claim 4.

In claim 10, line 24 (third line from the end of the claim), "said second split ring" lacks proper antecedent basis (it should apparently read --said second split nut--).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Japan 8-276475 (Figure 2) or Eggenberger et al. (U.S. Patent 3,729,283; Figure 2), in view of either the admitted prior art (as shown in Figures 9-10 of the instant disclosure and as described on pages 2-4) or Japan 2-143811 (Figures 1-2).

Japan '475 and Eggenberger et al. each disclose the split nut opening/closing device substantially as claimed, including plural tie bars attached to one platen and passing through another platen, and plural sets of split nuts associated with respective tie bars on said another platen, each split nut having left and right half pieces, and two connecting rods interconnecting two sets of split nuts, each connecting rod attached to one half piece of each split nut, the other half piece of each split nut slidably connected to each connecting rod, and a driving device configured to drive one of the half pieces of a split nut. Japan '475 and Eggenberger et al. do not disclose a link mechanism interconnecting each of the half pieces of each split nut. However, link mechanisms interconnecting each of the half pieces of split nuts in a clamping apparatus, including a guide box having a link plate supported by a support pin and pins on each half piece

Art Unit: 1722

cooperating with an elongated hole at each end of the link plate, are conventional in the art, as admitted by Applicant (see Figures 9-10 and pages 2-4 of the disclosure) and as shown in Japan '811. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the apparatus of either Japan '475 or Eggenberger et al. with such a conventional link mechanism for each split nut in order to simultaneously and symmetrically open and close the half pieces of each split nut. With regard to the "geared motor with brake" (claims 4-5), such is well known and conventional in the molding art for providing controlled reciprocation to a movable member, and it would have been obvious and well within the level of ordinary skill in the art at the time of the invention to modify either Japan '475 or Eggenberger et al. by providing the driving device as such a geared motor with brake, since such are equivalent driving means to the driving means of either Japan '475 or Eggenberger et al. (especially in view of the admitted geared driving device as shown in Figures 9-10 and as described on pages 2-4 of the disclosure).

7. Claim 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The prior art of record does not teach or fairly suggest the features of the guide box as claimed in claim 6.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

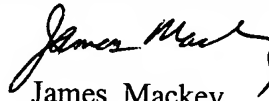
Art Unit: 1722

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Mackey whose telephone number is 703-308-1195. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 703-308-0457. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


James Mackey
Primary Examiner
Art Unit 1722

8/27/03

jpm
8/27/03